

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Opening Markets for Environmental Goods and Services

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Introduction

Trade barriers can be hazardous to the environment, at least those that prevent the free flow of environmental goods and services (EG&S). Roughly, these refer to the goods and services used to measure, prevent, limit, minimise or correct environmental damage. Studies have stressed the importance of eliminating barriers to trade in environmental goods and services as a key to improving environmental protection. And negotiations to reduce or eliminate barriers to trade in environmental goods and services are included in the current World Trade Organisation (WTO) talks. Today, because OECD countries have already eliminated most barriers to trade in EG&S, increasing trade flows in these products requires commitments from countries in the developing world.

Defining environmental goods and services is an important challenge. Since WTO ministers did not define the term, many countries have simply put forward lists of what they regard as environmental goods, mainly goods used for managing pollution or harvesting renewable energy. Some WTO members are also proposing "environmentally preferable products", such as bicycles and natural biodegradable materials, for consideration.

WTO members find it easier to agree on the definition of environmental services. Nonetheless, negotiations related to this sector are progressing slowly. To date, only a few developing-country and least-developed-country (LDC) members of the WTO have made any market opening commitments in this area.

This Policy Brief describes the background to the current trade negotiations and explains the broad positions taken by countries to date. It also provides a definition of environmental goods and services, examines the types of barriers that prevent them from being traded efficiently and explains the potential benefits from liberalising that trade. ■

Observer



What are environmental goods and services?

Countries seeking to negotiate trade liberalisation in a specific sector usually start with at least a rough idea of the products to be covered. WTO delegates working towards an agreement on environmental goods do not have the benefit of such a solid foundation because no universally accepted definition of environmental goods and services exists. But the one developed by a joint group of OECD and Eurostat experts in the 1990s for the environmental goods and services industry has often served as a useful starting point for analysis and discussion:

"The environmental goods and services industry consists of activities which produce goods and services to measure, prevent, limit, minimise or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco systems. This includes cleaner technologies, products and services that reduce environmental risk and minimise pollution and resource use."

When the OECD drew up a list of environmental goods for the purposes of studying trade and trade barriers, it classified them into four categories: pollution management, cleaner technologies and products, resource management, and environmentally preferable products (see Box).

Unlike many services sectors (computer and related services for example), environmental services do not constitute a distinct set of similar business activities. Oil-spill remediation is very different from air-pollution measurement and control, although both are environmental services. Differences can exist even within the same sub-sector. For instance, collecting hazardous waste requires much more sophisticated technologies and skills than collecting household refuse.

At the WTO, environmental services were initially grouped into only four categories: sewage services, refuse disposal, sanitation and similar services, and "others". Over the last 15 years, many WTO members have urged that

Box 1. OECD CLASSIFICATION OF ENVIRONMENTAL GOODS AND SERVICES

The **pollution management** group includes goods that help control air pollution; manage wastewater and solid waste; clean up soil, surface water and groundwater; reduce noise and vibrations; and facilitate environmental monitoring, analysis and assessment.

Cleaner technologies and products are goods that are intrinsically cleaner or more resource-efficient than available alternatives. For example, a solar photovoltaic power plant is fundamentally cleaner than a coal-fired one.

Goods under the category of resource management are used to control indoor pollution, supply water, or to help manage farms, forests or fisheries sustainably. This group also includes goods used to conserve energy (such as double-paned windows), and goods that help prevent or reduce the environmental impacts of natural disasters, such as fire-fighting equipment.

The United Nations Conference on Trade and Development (UNCTAD) defines **environmentally preferable products** as "products that cause significantly less environmental harm at some stage of their life cycle than alternative products that serve the same purpose". Examples include improved solid-fuel cooking stoves and reusable shopping bags made of canvas or jute rather than plastic or paper.



the classification of environmental services better reflect how the industry operates. Growing public sensitivity to environmental problems, more stringent regulations, and trends towards privatising and liberalising services markets have stimulated a wide range of specialised environmental services. Accordingly, more and more OECD countries are including additional categories in negotiations under the General Agreement on Trade in Services (GATS) at the WTO. These include nature and landscape protection, air pollution control, and remediation and clean-up of soil, surface water and groundwater.

Why liberalise trade in EG&S?

The first paragraph of the multilateral agreement establishing the WTO acknowledges the need to allow "for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so" in a manner consistent with the needs and concerns of countries at different levels of economic development. WTO ministers reiterated their commitment to sustainable development at the end of their 2001 Conference in Doha which launched the current world trade negotiations.

This commitment to sustainable development means that, in practice, WTO members, while pursuing reciprocal and mutually advantageous trade arrangements, would try to limit their effects on the environment. Reducing or eliminating tariff and non-tariff barriers to trade in EG&S was regarded as an obvious "win-win" proposition: good for trade, and good for the environment.

Since OECD countries already apply low or zero tariffs on industrial goods, including environmental goods, and have begun to liberalise trade in environmental services, the key to a successful outcome to these negotiations lies in the hands of developing countries.

Of course, reducing barriers to trade in developing countries would help open up markets for exports of environmental goods produced in OECD countries. But developing countries also produce and export environmental goods; and growth in exports from these countries has been faster in recent years than growth in exports of environmental goods from developed countries.

Increasing export opportunities was not the only benefit that ministers hoped to gain from the current round of multilateral trade negotiations. Consumers of EG&S would also benefit from lower prices, greater choice and higher quality brought about by more competition among suppliers. This means that, for a given amount of expenditure, more could be done to protect the environment.

OECD work on environmental goods and services has identified additional, less obvious benefits of liberalisation. Many multinational companies have made commitments to their shareholders to follow strict environmental criteria, wherever they operate. Keeping an open door to imports of helps make the supply of EG&S more reliable, thus improving the climate for investment.



Specialist providers of environmental goods and services, such as those who clean up oil spills or dispose of household waste, typically have access to the latest know-how and technology. That is not only good for local communities but also encourages the transfer of knowledge about pollution control into the importing country. The transfer is even greater when the service provider hires local people. OECD research on exports of environmental services to developing countries suggests that when the environmental service provider establishes a commercial presence in a foreign country, it usually hires most of its staff locally.

Successful liberalisation of environmental services requires a strong regulatory framework. This is especially true for environmental services that require dedicated infrastructure, such as sewage pipes and treatment plants. The OECD, in co-operation with UNCTAD, has recently produced a checklist to help developing countries manage the WTO negotiations on environmental services. This checklist helps governments ensure that they are able to liberalise trade in a manner that is compatible with national and development goals while at the same time managing to put necessary regulation into place in a timely manner.

What are the current barriers?

Trade barriers are normally divided into those related to tariffs and those related to everything else that can inhibit trade. Tariffs are applied only to goods, not to services. Since there is still no consensus among the international community as to what goods should be deemed "environmental", statistics on trade barriers are largely indicative.

In 1996, as the agreements under the previous Uruguay Round of trade talks were first being implemented, the average import tariff applied by most OECD countries on products included under the pollution management group was less than 3%. Tariffs applied by OECD members Korea, Mexico and Turkey were closer to 9% on average. However, for a group of emerging economies (Argentina, Brazil, Chile, India, Indonesia, Malaysia and Thailand), applied tariffs averaged almost 20%.

More recent analyses show that tariffs applied by low- and middle-income countries have dropped slightly, but remain on average more than 8%. However, this average disguises wide variations, with tariff rates ranging from close to zero in some smaller developing economies, to 15%-30% in other countries, including several larger ones.

Another distinguishing feature of developing countries' tariffs on environmental goods, as on industrial goods generally, is the wide gap between the maximum tariff they have agreed to apply (the "bound" tariff) and the tariffs they actually apply. The fact that many countries can at any time raise tariffs to the much higher "bound" levels – on average they are 32% among lowand middle-income economies – creates uncertainty for exporters, increasing risk and discouraging long-term investment in export-related capacity.

On the services side, barriers affect the different ways, or "modes", in which services are provided. An OECD study has identified numerous examples



of potential barriers to trade in environmental services. These include: allowing exports of services only through firms with commercial presence in the importing country; limiting the scope of foreign business to specified activities; and requiring that a specified, significant proportion of staff of the foreign established company be nationals of the host country, regardless of experience or qualifications.

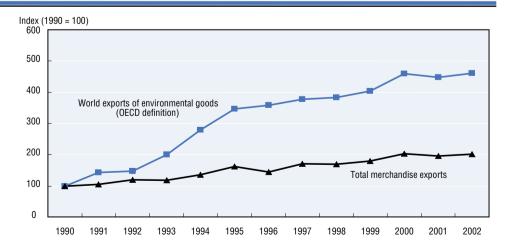
How have the negotiations been organised?

The negotiations on EG&S are taking place in separate WTO bodies. The Negotiating Group on Non-Agricultural Market Access (NAMA) is responsible for environmental goods, while the Special Session of the Council for Trade in Services (CTS-SS) is responsible for environmental services. To date, the priority in the NAMA has been to address over-arching issues related to industrial goods, leaving detailed discussions on environmental goods for later. In the meantime, the Committee on Trade and Environment in Special Session (CTE-SS) has been actively engaged in clarifying the definition of an environmental good.

WTO members recognise the advantage of pursuing liberalisation of international trade in environmental services in tandem with efforts to liberalise international trade in environmental goods. For this reason, the CTE is monitoring developments relating to the Doha mandate in order to ensure coherence between the two sets of negotiations.

Establishing a definition of environmental goods is particularly difficult. Environmental goods can potentially come from any of the commodity chapters used by the World Customs Organisation to classify goods, but do not specifically belong to any of them. As a result, WTO members have relied on listing particular products of interest for the discussions on environmental goods. Countries submitting such lists have usually sought to avoid "dual use" goods whose main or critical use is not environmental. ■

Figure 1. **GROWTH OF TRADE** IN ENVIRONMENTAL GOODS, 1990-2002



Source: Bijit, Bora and R. Teh (2004), "Tariffs and Trade in Environmental Goods", presentation to the WTO Workshop on Environmental Goods, Geneva.



How are negotiations progressing?

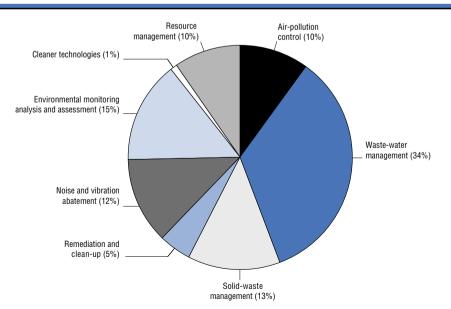
As of the end of August 2005, some 30 documents had been submitted to the CTE-SS addressing the discussion on EG&S. These include lists of proposed environmental goods submitted by seven OECD countries or regional groupings (Canada, the European Union, Japan, Korea, New Zealand, Switzerland and the United States) and two other WTO members (Qatar and Chinese Taipei). Many of the products originally appearing on the OECD lists drawn up in the late 1990s for the purpose of analysis can be found among these national submissions.

Several WTO members have also shared their ideas on practical aspects of the negotiations. For instance, a few submissions have addressed the potential structure of an environmental goods list, including the possibility of multiple lists as well as a periodic updating of any agreed WTO list to incorporate new products in the future.

Negotiations on environmental services have progressed slowly. Before the current round of negotiations started, most OECD countries had made binding commitments regarding market access and national treatment (i.e., an assurance that the country will not discriminate in favour of domestic service suppliers) for environmental services. Several economies in transition also made similar commitments. Yet only around 20 developing or leastdeveloped countries had made commitments on one or more environmental service sub-sectors, although several of them had effectively removed all restrictions or limitations on market access and national treatment.

By August 2005, the CTS-SS had received new or revised offers from a few more developing-country and LDC members, but the numbers have not been overwhelming. The general opinion is that the current offers would open few new commercial opportunities for service providers. In view of the potential

Figure 2. TRADE BY CATEGORIES OF ENVIRONMENTAL **GOOD (OECD DEFINITION)**



Source: Bijit, Bora and R. Teh (2004), "Tariffs and Trade in Environmental Goods", presentation to the WTO Workshop on Environmental Goods, Geneva.



contribution that increased trade in environmental services could make to supporting policies aimed at improving the environment, OECD countries are currently exploring ways to hasten progress in these vital negotiations.

What next?

OECD members are hopeful that consensus on a set of environmental goods could emerge before December 2005, and that WTO ministers will then agree for that set to be referred to the NAMA, where the negotiations on modalities for opening markets in environmental goods will take place.

Modalities concern, most importantly, how fast and how far tariffs on environmental goods will be reduced or even eliminated. The other key issue is how to incorporate the principle of special and differential treatment, which allows for the possibility of longer implementation periods, or measures to increase trading opportunities, for developing countries.

WTO members will also have to decide whether to agree to review the composition of the list of environmental goods periodically in light of new knowledge and technological developments, as well as how to organise that task. Finally, if they are to fulfil the mandate set by WTO ministers, members will also have to begin considering non-tariff barriers affecting trade in environmental goods, and how to reduce or eliminate them.

As for environmental services, at this point it is impossible to foresee what type of outcome could be achieved because the fate of the negotiations on environmental services is tied to the services negotiations as a whole.

In short, much work remains to be done at the WTO before a final outcome on environmental goods and services is achieved. But if WTO members keep the environmental benefits of trade liberalisation in focus, there is every possibility that, within a few years, exports and imports of environmental goods and services will be flowing much more freely, to the benefit of the global environment. ■

For further information

More information about the OECD's work on environmental goods and services can be obtained from:

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The OECD Secretariat by E-mail: trade.secretariat@oecd.org

The OECD Trade and Environment Web site at www.oecd.org/ech/environment

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For further reading

OECD (2001), Environmental Goods and Services: The Benefits of Further Global Trade Liberalisation, OECD, Paris.

For information on the WTO negotiations on environmental goods go to the WTO's portal: www.wto.org/english/tratop e/enuir e/enuir negotiations e.htm.

The following OECD reports and publications can be obtained from the OECD's Trade and Environment web site www.oecd.org/ech/tradenv.

OECD (2005), Environmental Goods and Services: A Synthesis of National Case Studies, OECD Trade and Environment Working Papers, No. 2005-03, OECD, Paris.

OECD (2005), Synergies Between Trade In Environmental Services And Trade In Environmental Goods, OECD Trade and Environment Working Papers, No. 2005-01, OECD, Paris.

OECD (2005), Managing Request-Offer Negotiations under the GATS: The Case of Environmental Services, OECD Trade Policy Working Papers, No. 11, OECD, Paris.

OECD (2004), Environmental Goods: A Comparison of the APEC and **OECD Lists**, available at www.oecd.org/ech/tradenv under "Publications and Documents," then "Reports".

OECD (2005), Policy Brief: Opening Up Trade in Services: Crucial for Economic Growth, OECD, Paris.

For other Policy Briefs on the WTO and Doha negotiations see www.oecd.org/publications/policybriefs.

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